

## Exhibit 11 – Second-Adjacent Showing and FAA Drawing

Application requests a waiver for a location which is short-spaced on a second-adjacent channel with BLH-20111115ABD, callsign WHRB, class A, status LIC, Cambridge, MA, channel 237, facility ID 26341[3]

Undesired-to-Desired Ratio Method	
BLH-20111115ABD f(50,50) signal	93.6 dBu [1][2]
Second-adjacent protection	+ 40 dB
Interference-zone boundary	133.6 dBu
Distance to 133.6 dBu	12.3 m (ERP <= 0.071 kW) [1]

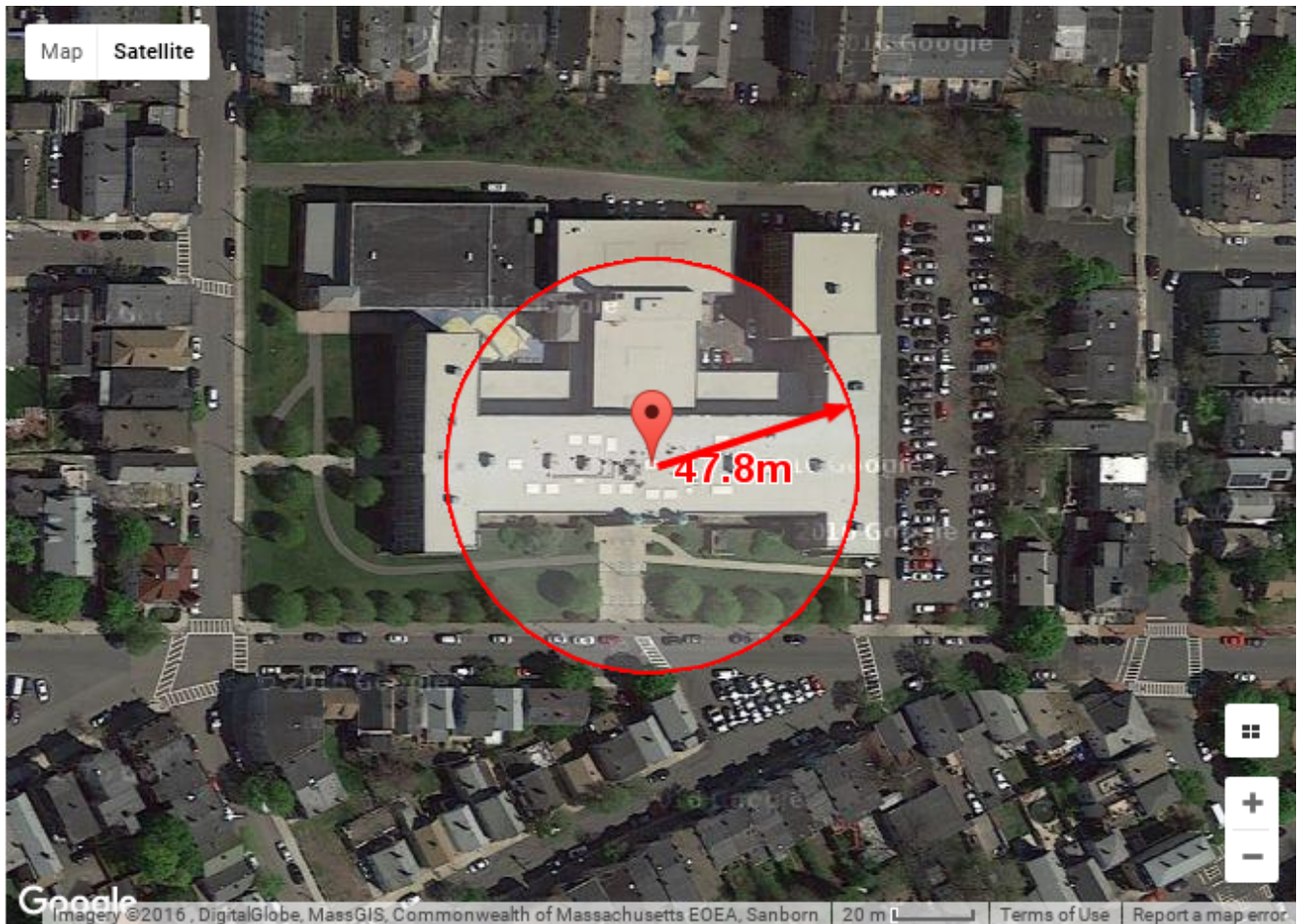
Application requests a waiver for a location which is short-spaced on a second-adjacent channel with BLH-20031201AWA, callsign WJMN, class B, status LIC, Boston, MA, channel 233, facility ID 53972[3]

Undesired-to-Desired Ratio Method	
BLH-20031201AWA f(50,50) signal	81.8 dBu [1][2]
Second-adjacent protection	+ 40 dB
Interference-zone boundary	121.8 dBu
Distance to 121.8 dBu	47.8 m (ERP <= 0.071 kW) [1]

The interference zones produce a worst-case circle of radius 47.8 meters on the ground which is shown on the following map. Given the elevation pattern of the 2-bay Micronetixx FML with 0.70-wavelength spacing, interference will proceed no more than  $47.8 * 0.2361 = 11.3$  meters or 37 feet below the radiation center. From the sketch below, there are  $27 + 32 = 59$  feet between people's feet and the radiation center or 53 feet from their heads to the radiation center. Interference will remain well above people's heads and does not touch major roadways, thus no population will be subject to interference from the proposed station according to the undesired-to-desired ratio method.

### FAA Note

The overall antenna structure height is 20 feet above the building's structural towers.



[1] tvfmfs() Fortran subroutine as distributed by the FCC. At distances less than or equal to 1.5 km, tvfmfs() uses the free-space method.

[2] FCC HAAT Calculator web page,

[http://transition.fcc.gov/mb/audio/bickel/haat\\_calculator.html](http://transition.fcc.gov/mb/audio/bickel/haat_calculator.html)

[3] CDBS database downloaded 2016-09-02 03:46:00

